Government of West Bengal during the last three years under the Centrally Sponsored Scheme—National Programme on Improved Chulhas (NPIC) is given below:

| Year | Funds released | Funds utilized |
|---|---|---|
| 1999-2000 | Rs. 2.09 crore | Rs. 2.09 crore |
| 2000-2001 | Rs. 3.00 crore | Rs. 2.06 crore |
| 2001-2002 | Rs. 0.75 crore | Rs. 3.36 crore |

Besides, West Bengal Renewable Energy Development Anency, Khadi and Village Industries Commission and All India Women's Conference implemented the programme in the State.

(c) Besides the State nodal department and agencies, Technical Back-up Unit, University of Kalyani, West Bengal and Regional Office of the Ministry, Bhubaneswar were involved in monitoring the implementation of the programme in the State.

(d) For better implementation of the programme, the State nodal department had taken steps to actively involve Panchayat Institutions and non-Governmental Organisations.

**Solar Electrification Programme**

1601. SHRI RAMA MUNI REDDY SIRIGIREDDY: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the amount allocated to the State Governments under Solar Electrification Programme since 1996; year-wise and State-wise;

(b) the total solar energy produced in the country since 1996; year-wise and State-wise;

(c) whether the Ministry is thinking of setting up of any new wing within IREDA to give impetus to solar energy programme; and

(d) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) The Ministry of Non-Conventional Energy Sources has been implementing a country-wide, Solar Photovoltaic (SPV) Programme under which installation of solar photovoltaic systems and power plants for lighting, water pumping

and other services is being supported. There was no separate programme for solar electrification of villages prior to 2001-02. During the year 2001-02, the Ministry initiated a new programme for the electrification of villages in remote and difficult areas of the country through renewable energy technologies like solar photovoltaics, small hydro units and biomass gasifiers, based on locally available resources. The financial assistance provided during 2001-02 and 2002-03 (till 30th November 2002) for solar village electrification projects in different States is given in Statement-I (*See* below).

(b) The estimated year-wise energy generated from the Solar Photovoltaic (SPV) systems and power plants installed under the Ministry's programmes in different States from 1995-96 to 2001-02 is given in Statement-II (*See* below).

(c) and (d) The Indian renewable Energy Development Agency (IREDA) Limited, New Delhi is providing loan assistance for projects in various renewable energy sectors, including solar energy. IREDA has a separate cell under its Technical Department for appraisal of solar energy projects and management of loans sanctioned to these projects. At present, there is no proposal to set up any new wing in IREDA for solar energy programmes.

***Statement-I***

*Financial Assistance Released during 2001-02 and 2002-03 for Solar Village Electrification Projects*

| S. No. | State | Financial Assistance Released (Rs. in Lakhs) 2001-02 | 2002-03 as on 31-11-02 |
|---|---|---|---|
| 1 | Chhattisgarh | 241.00 | 27.00 |
| 2 | Jammu and Kashmir | 744.30 | 2.00 |
| 3 | Uttaranchal | 165.00 | 157.05 |
| 4 | Uttar Pradesh | 199.40 | - |
| 5 | Tripura | 93.00 | - |
| 6 | West Bengal | 380.10 | - |
| | TOTAL: | 1822.80 | 186.05 |

***Statement-II***

*State-wise and Year-wise Estimated Energy Generated (in Million Units) from the Solar Photovoltaic (SPV) Systems and Power Plants installed under the Ministry Programmes*

| Sl. No. | State/UT | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 | 2001-02 |
|---|---|---|---|---|---|---|---|---|
| 1. | Andhra Pradesh | 0.36 | 0.46 | 0.45 | 0.49 | 0.53 | 0.67 | 0.73 |
| 2. | Arunachal Pradesh | 0.12 | 0.12 | 0.12 | 0.15 | 0.17 | 0.2 | 0.19 |
| 3. | Assam | 0.06 | 0.07 | 0.07 | 0.08 | 0.11 | 0.11 | 0.12 |
| 4. | Bihar | 0.09 | 0.07 | 0.38 | 0.44 | 0.6 | 0.73 | 0.73 |
| 5. | Chhattisgarh(*) | — | — | — | — | — | — | — |
| 6. | Goa | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| 7. | Gujarat | 0.24 | 0.26 | 0.28 | 0.32 | 0.39 | 0.47 | 0.75 |
| 8. | Haryana | 0.15 | 0.2 | 0.25 | 0.38 | 0.47 | 0.63 | 0.73 |
| 9. | Himachal Pradesh | 0.11 | 0.18 | 0.34 | 0.49 | 0.49 | 0.73 | 0.09 |
| 10. | Jammu and Kashmir | 0.15 | 0.19 | 0.34 | 0.35 | 0.45 | 0.69 | 0.78 |
| 11. | Jharkhand(*) | — | — | — | — | — | — | — |
| 12. | Karnataka | 0.04 | 0.06 | 0.05 | 0.07 | 0.07 | 0.08 | 0.18 |
| 13. | Kerala | 0.17 | 0.28 | 0.46 | 0.48 | 0.54 | 0.69 | 0.76 |
| 14. | Madhya Pradesh | 0.63 | 0.63 | 0. 7 | 0.71 | 0.72 | 0.77 | 0.75 |
| 15. | Maharashtra | 0.41 | 0.41 | 0.04 | 0.41 | 0.43 | 0.44 | 0.46 |
| 16. | Manipur | 0.05 | 0.06 | 0.05 | 0.08 | 0.09 | 0.11 | 0.11 |
| 17. | Meghalaya | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.18 |
| 18. | Mizoram | 0.12 | 0.13 | 0.13 | 0.13 | 0.16 | 0.18 | 0.17 |
| 19. | Nagaland | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 |
| 20. | Orissa | 0.34 | 0.36 | 0.33 | 0.36 | 0.51 | 0.79 | 0.82 |
| 21. | Punjab | 0.01 | 0.02 | 0.02 | 0.06 | 0.3 | 0.44 | 0.55 |
| 22. | Rajasthan | 0.77 | 0.77 | 0.10 | 1.29 | 1.55 | 1.68 | 2.06 |
| 23. | Sikkim | 0.02 | 0.02 | 0.03 | 0.03 | 0.33 | 0.35 | 0.39 |
| 24. | Tamil Nadu | 0.27 | 0.28 | 0.29 | 0.3 | 0.33 | 0.35 | 0.39 |
| 25. | Tripura | 0.18 | 0.2 | 0.07 | 0.13 | 0.17 | 0.26 | 0.38 |
| 26. | Uttar Pradesh | 1.95 | 2.49 | 2.98 | 3.68 | 4.12 | 4.36 | 3.01 |
| 27. | Uttaranchal(*) | — | — | — | — | — | — | 2.07 |
| 28. | West Bengal | 0.2 | 0.24 | 0.26 | 0.4 | 0.64 | 0.97 | 1.48 |
| 29. | A and N Island | 0.23 | 0.25 | 0.25 | 0.25 | 0.25 | 0.29 | 0.29 |
| 30. | Chandigarh | — | — | — | — | 0.01 | 0.02 | 0.02 |
| 31. | Dadra & Nagar Haveli | — | — | — | — | — | — | — |
| 32. | Daman and Diu | — | — | — | — | — | — | — |

| Sl. No. | State/UT | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 | 2001-02 |
|---|---|---|---|---|---|---|---|---|
| 33. | Delhi | 0.08 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 |
| 34. | Lakshadweep | 0.09 | 0.09 | 0.01 | 0.12 | 0.14 | 0.28 | 0.3 |
| 35. | Pondicherry | — | — | — | — | 0.01 | 0.01 | 0.01 |
| 36. | Other (PSUs and NGOs operating in more than one State) | — | — | 0.12 | 0.12 | 0.12 | 0.16 | 0.17 |
| | TOTAL: | 7.02 | 8.24 | 9.79 | 11.64 | 13.73 | 16.48 | 19.29 |

(*)— These States were created during 1999-2000. The estimated energy generated from the SPV systems and power plants installed in these States are included in the figures of the undivided States i.e. Uttar Pradesh for Uttaranchal, Madhya Pradesh for Chhattisgarh, and Bihar for Jaharkhand. In case of Uttaranchal, separate figures are available for the year 2001-02.

**Allocation of fund under Solar Village Electrification Scheme to Madhya Pradesh**

1602. MISS MABEL REBELLO: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) how many villages in Madhya Pradesh have been electrified with the help of solar energy cells during the last three years;

(b) what is the potential of electricity connection using solar energy in the State;

(c) the steps taken by Government to exploit the potential in the State; and

(d) how much of funds have been allotted to Madhya Pradesh under the Solar Village Electrification Scheme during this year?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) The Ministry of Non-Conventional Energy Sources initiated a programme during 2001-02 for the electrification of villages in remote and difficult areas in the entire country including the State of Madhya Pradesh, through installation of suitable systems based on locally available renewable energy sources, like solar photovoltaic (SPV) systems & power plants, small hydro units and biomass gasifier systems.